Remarks/Arguments

This paper is submitted responsive to the Final Office Action mailed September 11, 2007. Reconsideration of the application in light of the accompanying remarks and arguments is respectfully requested.

In the response, claims 1, 21-23 and 49 have been amended, claims 25-48 have been cancelled without prejudice, and claims 59-60 added. No new matter has been added.

Claims 1 and 49 have been amended to call for the interconnect to have a first coefficient of thermal expansion, for the electrode to have a second coefficient of thermal expansion, and for the interconnect to be bonded to the electrode and the separator plate. As described in the specification, the compliant substructure and superstructure of the present interconnect allows for this bonding without the CTE mismatch causing problems.

Claims 21-24 have been amended to clarify the scope of these claims in connection with certain embodiments of the invention. These claims now recite nickel-based, nickel-chromium-based and noble metal-coated alloys, all as called for in the specification.

New claims 59 and 60 call for the electrode to which the interconnect is bonded to comprise a ceramic electrode. This further highlights the difference of the subject matter of the present invention from some of the applied prior art as discussed below, as well as amplifying certain novel features of the invention.

The Examiner rejected claims 4-9, 28-33 and 52 under 35 USC 112, second paragraph. The independent claims from which these dependent claims depend have been amended and

it is believed that these amendments address the Examiner's concerns.

The Examiner rejected independent claims 1, 25 and 49 as anticipated by WO 99/13522 (Jaffrey). Claims 1 and 49 have been amended to recite additional subject matter, specifically that the interconnect is bonded to the separator plate and the electrode. In addition, these claims already recited the woven substructure formed into a compliant superstructure having spaced contact zones. These terms are believed to be clear as defined by the specification. The superstructure is formed into a structure which defines the spaced contact zones, and the superstructure itself is made of a woven structure, which is referred to as a substructure.

Jaffrey is drawn to an SOFC structure, but the interconnect does not have the claimed woven substructure formed into a compliant superstructure. Jaffrey teaches a simple flat screen. This may be considered to be a woven structure, but it is not at all formed into a superstructure defining spaced contact zones as called for by the claims. Jaffrey clearly fails to teach the subject matter of independent claims 1 and 49 as amended. Based upon the foregoing, it is again urged that claim 1 is allowable over Jaffrey.

The Examiner rejected independent claims 1 and 25 as anticipated by Singh. It is noted that claim 1 has been amended to recite that the interconnect is bonded to the separator plate and to the electrode. This is critical in the present application. Turning to the Singh reference, this disclosure is directed to a different type of fuel cell which is well known to persons of ordinary skill in

the art to not have a bond between the interconnect and the adjacent fuel cell components. Rather, these components are held together by a very large compressive force, and the components themselves are intended to slide one relative to the other to facilitate changes such as differential in thermal expansion during use. This is consistent with the teachings of Singh.

In connection with the present invention, a preferred embodiment is drawn to one where the interconnect is bonded to both the separator plate and the electrode. Singh does not at all disclose or suggest that the interconnect be bonded to the separator plate and the electrode. Thus Singh does not anticipate claim 1 as amended.

Furthermore, claim 1 is not obviated by Singh. Singh discloses a molten carbonate fuel cell. In such a cell, it is well known to persons skilled in the art that there is no bonding between the interconnect and the electrode. This allows sliding of these components relative to each other, and thereby avoids any issues of CTE mismatch in the molten carbonate fuel cell. Thus, a person skilled in the art, taking the Singh reference as a whole, would recognize that the teaching is from a technical field wherein requirements and issues are completely different from those of the SOFC environment of the present claims.

It is submitted that a person of ordinary skill in the art, understanding that bonding is needed for an SOFC environment, would dismiss the teachings of Singh as not pertinent and/or not likely to produce anything successful in an SOFC environment. Singh does not disclose or suggest the subject matter of claim 1 as amended.

Claim 49 has been amended in similar manner to claim 1 and is submitted to be allowable based upon the arguments set forth above.

Claims 1 and 25 were also rejected by the Examiner as anticipated by DE 19517443 (DE '443). DE '443 is similar to Singh in that it teaches a molten carbonate fuel cell having completely different operating parameters and structures. One of these differences is the lack in DE '443 of any bonding between the interconnect and either of the separator plate or the electrode. Thus, DE '443 clearly fails to anticipate claim 1 as amended.

In connection with the dependent claims, these claims all depend directly or indirectly from claims 1 or 49 and are believed to be allowable based upon this dependency. In addition, these claims call for subject matter which is also believed to be separately patentable.

A two month extension of time has been authorized along with filing of this paper. It is believed that no additional fee is due. If, however, any such fee is due, please charge same to Deposit Account 02-0184.

Respectfully submitted,

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